

**Hamburger Erklärung 2022 [Hamburg Declaration]**  
**To globally end high-risk "gain-of-function" research on pathogens with**  
**global pandemic potential.**

22<sup>th</sup> February 2022

*Translated from original German version with deepl.com*

Conscious of the mission and responsibility of science and research to serve the welfare of humankind, to strive for truth and to communicate the knowledge gained to the general public, the signatories to this Declaration wish to draw attention to a major threat to human existence that has arisen in recent years as a result of novel biotechnological processes for modifying dangerous pathogens.

Through so-called gain-of-function research, naturally occurring viruses are adapted through changes in the gene sequence in such a way that their docking with and invasion of human cells is facilitated. This creates an enormous potential for a pandemic, which responsible scientists have repeatedly pointed out over the past ten years. Such research has been conducted in recent years on various highly dangerous pathogens such as avian flu viruses and SARS-like coronaviruses, which is documented in the literature. Much of this work was also done in the context of publicly funded research projects.

The current Corona pandemic clearly demonstrates what it means when pathogens are extremely easily transmitted from person to person. Millions of people around the world have died and billions of people have lost or lost their livelihoods altogether. The enormous damage to humanity occurred even though the mortality rate of the SARS-CoV-2 virus is only in the percentage range. There is evidence that in various biotechnology laboratories of the world much more dangerous viruses like MERS, Ebola, or Nipah viruses are being genetically engineered. The outcome of such experiments is often difficult or impossible to predict. However, no biotechnology laboratory in the world is safe enough to guarantee that such genetically modified viruses will not escape. A catastrophic event could be fatal for a substantial proportion of the world's population, especially if transmissibility of highly dangerous viruses through the human respiratory tract is facilitated by genetic modification.

We as scientists are aware of the importance of the freedom of science and research. Nevertheless, we appeal to all politicians around the world to ensure that this "gain-of-function" research on pathogens with global pandemic potential ends immediately. The risk associated with this research and the potential for the extinction of large portions of the world's population are no longer acceptable. We demand that the stop be controlled and continuously monitored by an independent international supervisory authority.

Irrespective of the form of government of the countries of this world, it must be the concern of every responsibly acting leader to contribute to the well-being of the population of their own country, but also to humanity as a whole. Man has learned to intervene in the basic molecular building blocks of life. This gives rise to many opportunities to improve human life, but also to a great responsibility to preserve creation. Let us take this responsibility seriously before it is too late.

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